A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
This is interpreted into machine code.  
There exist a lot of different approaches for each of those tasks.  
However, readability is more than just programming style.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Ideally, the programming language best suited for the task at hand will be selected.  
Scripting and breakpointing is also part of this process.  
In 1206, the Arab engineer Al-Jazari invented a programmable drum machine where a musical mechanical automaton could be made to play different rhythms and drum patterns, via pegs and cams.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
Their jobs usually involve:  
 Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language.  
 Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.